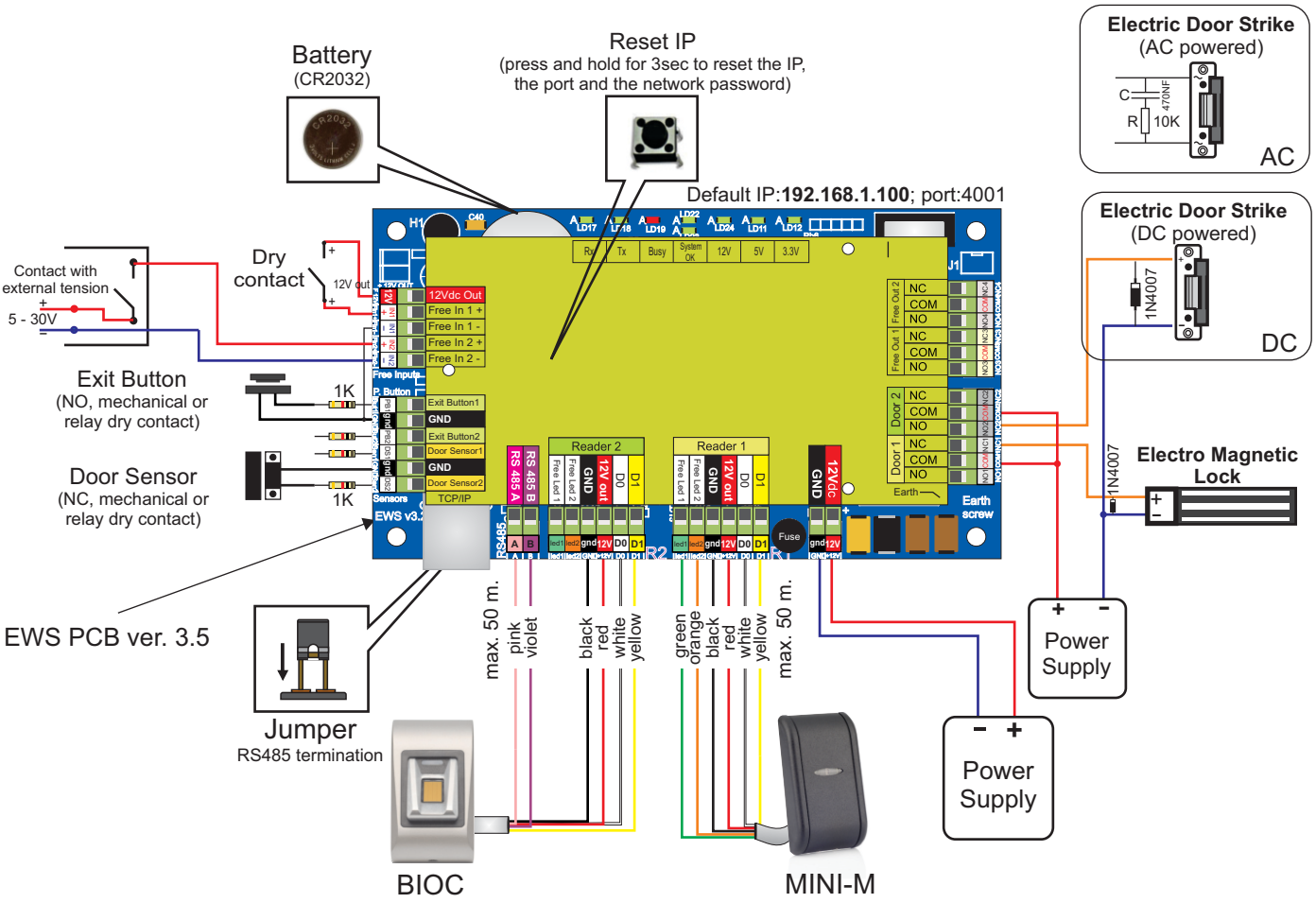
Quick Installation Guide (for EWS ver.3.5)

Complete user manual and software supplied on the CD-R provided or on www.visual-plus.com



Specifications:

Power Supply:	11-15VDC
User Capacity:	max. 15000
Event capacity:	max. 30000
Communication:	TCP/IP or RS485
Controllers per system:	unlimited
Door relays:	2 (250 VAC, 10A)
Programmable Outputs:	2 (250 VAC, 10A)
Readers:	2
Programmable Inputs:	2 (5-30VDC, 3-28mA)
Door sensors:	2
Exit Button Inputs:	2
Wiegand interface:	26bit, 34bit or customizable (8 to 128bit)
Entry Mode:	Card, PIN, Finger, Card or/and PIN, Card or/and Finger, PIN or/and Finger, Finger on Card
Environment temperature:	0 - 45°C
Humidity:	0-80 %, non condensing
Tamper:	Yes
Consumption:	300 mA (without readers)

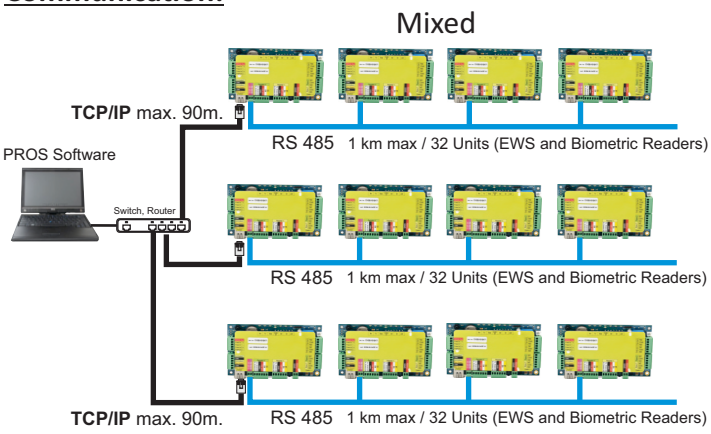
Installation:

1. Insert the battery provided with the hardware kit.
2. Connect the devices according to the connection diagram above.
3. Use the provided 1K resistors for the Door Sensors and Push Buttons.
4. Use the diodes provided when the door lock is DC powered or the capacitor+10K resistor when the lock is AC powered.
5. Use the provided resistors for RS485 tuning.

Instructions:

1. Keep the distance reader to controller less than 50 meters.
2. Always use twisted pair cables when wiring a RS485 network (biometric readers or EWS controllers).
3. Do not use twisted pair cables for the Wiegand wires (D0 and D1).
4. Always keep the RS485 line in daisy chain.
5. **Make sure that the terminal block is correctly inserted, make sure that is not shifted left/right by one position and see if the wires are not put in reverse order.**
6. **Do not swap the RS485 terminal with the power supply terminal.**
7. All the controllers that are communicating via TCP/IP must have different IP address.

Communication:


Mixed
TCP/IP max. 90m.
PROS Software
Switch, Router
RS 485 1 km max / 32 Units (EWS and Biometric Readers)
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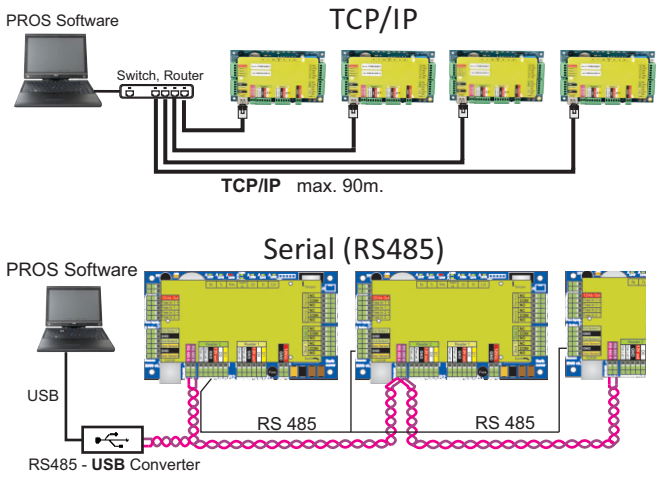
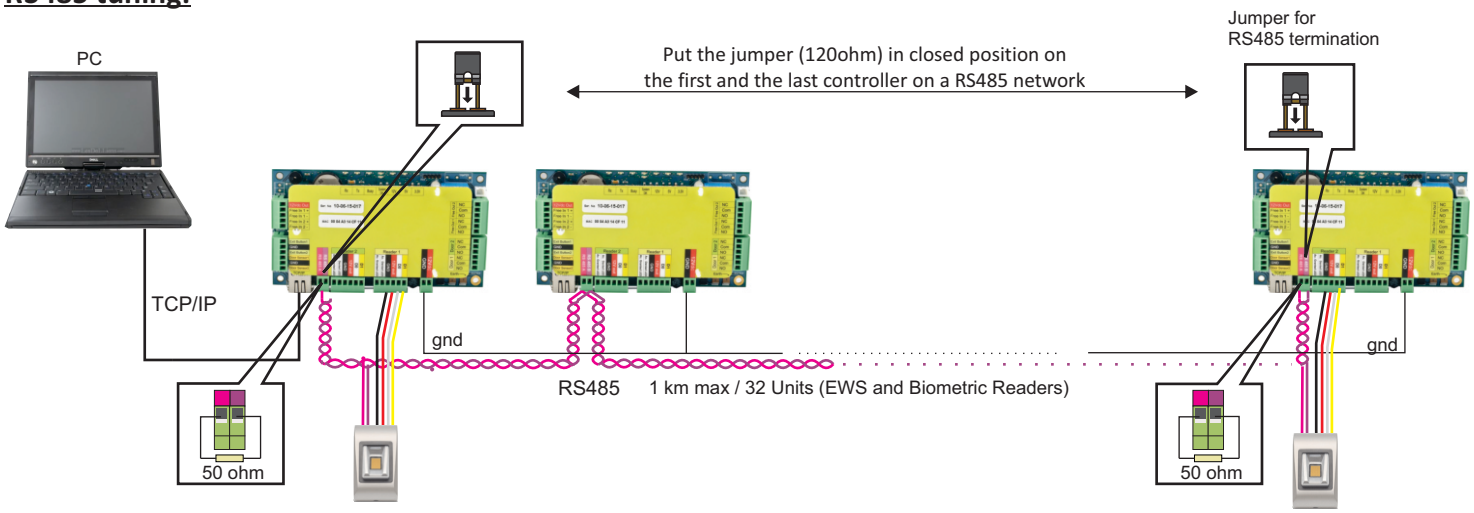
TCP/IP max. 90m.
RS 485 1 km max / 32 Units (EWS and Biometric Readers)



RS485 tuning:



IMPORTANT NOTE:

- The RS485 Communication Line must be made in daisy chain, NOT in a star type configuration.
- The cable must be twisted and shielded. If the shield is used, connect the EARTH from ONE side of the RS 485 Line to the shield cable.
- Connect the ground of each unit in the RS 485 Line using a third wire in the same cable.

RS485 Termination resistors:

- Terminate both ends of the line with 120 Ohm resistor. If end of line is EWS, use built in resistor (120 ohm) by closing the jumper.
- If the communication is not established and stable, use the external resistors provided in the hardware kit.

When using CAT 5 compatible cable, in most of the cases, termination made with 50 Ohm external resistor or combination of 50 Ohm external and termination resistor from the EWS (120 Ohm) should be the solution.